

# BREEDING HORSES FOR THE UNITED STATES ARMY.

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FOR SEVERAL years the United States Government has been confronted with the difficult task of obtaining a sufficient number of horses of the right types for cavalry and light artillery use. Such types of horses have been scarce and are gradually becoming scarcer because motor-propelled vehicles have curtailed the demand for driving and delivery-wagon horses to such an extent that farmers have practically discontinued the breeding of light horses and instead have turned their attention to the production of draft horses. While our draft-horse stock has been improving in quality in recent years, our light-horse stock has been deteriorating.

In an effort to remedy this condition, which was of direct importance to the military strength of our Nation, because the War Department had depended upon the light horses produced by private breeders for its supply of Army horses, Congress provided in a limited way to encourage the production of such horses. The results of this undertaking, which are discussed herewith in detail, have been satisfactory. In order to furnish an adequate supply of light horses for our Army on a peace footing as well as to create a reserve which will be needed in recouping an Army actively engaged in war, when the demands are infinitely greater, this plan of encouragement should be considerably increased in scope.

## GOVERNMENT ENCOURAGEMENT.

This plan of encouraging farmers in certain localities in producing more and better light horses, especially of military types, was put into operation beginning with the breeding season of 1913. The work was assigned to the Department of Agriculture, this department cooperating with the War Department in the furtherance of this plan. The plan adopted by the Government consists primarily in placing

sound stallions of proper type and belonging to the Thoroughbred, American Saddle, Standardbred, and Morgan breeds in suitable localities. The work was inaugurated in the States of Vermont, New Hampshire, Virginia, West Virginia, Kentucky, and Tennessee.

### STALLIONS USED.

The Government purchased only stallions of merit. The first requisites were that they should be good, sound individuals and registered in the proper studbooks. Good breeding was sought, and in many cases stake and show-ring winners were obtained, but they were selected more largely on account of conforming to the saddle or artillery type than because of any previous records or solely on account of pedigree. The following stallions were purchased:

#### *Stallions purchased by the Government.*

Name.	Year foaled.	Color.	Height.	Weight.	Breeding.
THOROUGHBREDS.			<i>Hands.</i>	<i>Pounds.</i>	
Charcot.....	1903	Brown..	16	1,240	By Common; dam, Spanish Match, by Royal Hampton.
Gold Heels.....	1899	Bay....	15.1 $\frac{1}{2}$	1,170	By The Bard; dam, Heel and Toe, by Glenelg.
Kind Sir.....	1909	...do....	15.3	1,100	By Flambeau; dam, Floradora, by Meddler.
Myles O'Connell.....	1907	Brown..	15.3 $\frac{1}{2}$	1,100	By Milos; dam, Meteora, by Magnet.
Jack Parker.....	1906	Chestnut	16.0 $\frac{1}{2}$	1,190	By Golden Garter; dam, Flora Mae, by Falsetto.
Ganadore.....	1909	Bay....	16.0 $\frac{1}{2}$	1,100	By The Commoner; dam, Mountain Mist, by Magnetizer.
Lynchburg.....	1909	Brown..	15.2 $\frac{1}{2}$	1,050	By The Scribe; dam, Rose Washington, by Faustus.
Single File.....	1908	Bay....	16.1	1,140	By Sir Dixon; dam, Single Shot, by Star Shoot.
Demodus.....	1910	...do....	15.3 $\frac{1}{2}$	1,070	By Nasturtium; dam, Iveragh, by Springfield.
SADDLE HORSES.					
Richmond Choice 4578..	1910	Black...	15.3	1,175	By Rex Peavine 1796; dam, Dianah Mason 5816, by King Richard 2879.
Victor Peavine 5264....	1911	Chestnut	15.2	1,100	By Rex Peavine 1796; dam, Pattie Stone 5773, by King Richard 2879.

## Stallions purchased by the Government—Continued.

Name.	Year foaled.	Color.	Height.	Weight.	Breeding.
SADDLE HORSES—CON.					
			<i>Hands.</i>	<i>Pounds.</i>	
Fairacre King 4059.....	1909	Chestnut	15. 2½	1,090	By Bourbon King 1788; dam, Aletha Chief, by Bourbon Chief 976.
Young Bill 5910.....	1908	...do ...	15. 2½	1,100	By Golden King 2359; dam, Mary Wells 2784, by Bourbon Chief 976.
Beechwold Chester 6226..	1906	Brown..	16.	1,150	By Happy Dare 1870; dam, Mollie Nichols 4788, by Denmark Chief J. B. 682.
Captain Peary 4161.....	1909	Bay.....	15. 2½	1,050	By Highland Flower 1662; dam, Nancy Lee 476, by Monto Cristo 59.
Hamilton's Chief 5801...	1908	Chestnut	15. 3	1,060	By Bourbon Chief 976; dam, Belle McDonald 1499, by Rex McDonald 833.
Highland Cloud 3490...	1908	Bay.....	16	1,250	By Cloud King 2198; dam, Valeda 2613, by Highland Denmark 730.
Jesse Dare 6100.....	1907	Chestnut	16. 2	1,265	By Highland Dare 1534; dam, Lizzie Squirrel 9091, by Black Squirrel 58.
Judge Collins 2553.....	1904	Bay.....	16. 1	1,120	By Highland Denmark 730; dam, Nora N 2071, by Black Squirrel 58.
High Vine 2733.....	1904	Chestnut	15. 1½	1,160	By Highland Gaines 1667; dam, Bessie Sable 2882, by Shropshire Kentucky Squirrel 1365.
STANDARD BREDS.					
MacNunne 45328.....	1906	Bay.....	16. 2½	1,300	By McDougall 33606; dam, The Nunne, by Young Jim 2009.
Sigler 51525.....	1909	...do ...	15. 2½	1,180	By Red Medium 30516; dam, Maud Sigler, by Wilton 5982.
Lord Rion 52777.....	1906	...do ...	16	1,160	By Arion 18000; dam, Madge Fullerton, by Young Fullerton 3528.
Twilight M. 41993.....	1905	Chestnut	15. 2½	1,160	By Delmont J. 39474; dam, May Fry, by Charleston 9589.
Be Gue 52852.....	1905	Bay.....	15. 3	1,075	By Wiggins 33907; dam, Lady Crescent, by Cyclone 1956.
King Spier 46820.....	1907	Brown..	15. 2	1,160	By Directum Spier 35012; dam, Lady Thisbe, by Milroi 20585.
Richford Jay 52050.....	1909	Bay.....	16	1,300	By Jay McGregor 37692; dam, Ecka, by Richford Baron 44951.
Glacier B. 32181.....	1899	Black...	15. 2	1,100	By Bob Mc 20539; dam, L. E. W., by Clark Chief, jr. 2110.
The Tribesman 54716...	1907	Brown..	15. 2½	1,050	By The Clansman 40942; dam, Black Eagle Belle, by Bow Bells 13073.

## Stallions purchased by the Government—Continued.

Name.	Year foaled.	Color.	Height.	Weight.	Breeding.
STANDARD BREDS—CON.			<i>Hands.</i>	<i>Pounds.</i>	
Hamlin McKinney 53966	1907	Bay.....	15.1	1,000	By McKinney 8818; dam, Lucinda Hamlin, by Mambrino King 1279.
MORGANS.					
Daniel Webster Lambert 6520.	1907	Chestnut	14.2½	925	By Lambert B. 5238; dam, Aggie, by Cobden 1515.
Madison Lambert 6530..	1907	Bay.....	15.1	1,030	By Lambert B. 5238; dam, Jessie T., by Harlus.
Donlyn 5849.....	1909	...do....	14.3	1,000	By Donald 5224; dam, by Billy Roberts, 4550.

In addition to the above-mentioned stallions the following thoroughbreds have been donated to the Government and have been used in the remount-breeding work of the Agricultural Department, and the Morgans named below, from the United States Morgan Horse Farm, Middlebury, Vt., have also been used in this work.

## Stallions donated to the Government.

Name.	Year foaled.	Color.	Height.	Weight.	Breeding.
THOROUGHBREDS.			<i>Hands.</i>	<i>Pounds.</i>	
Henry of Navarre <sup>a</sup> ....	1891	Chestnut	15.1½	1,100	By Knight of Ellerslie; dam, Moss Rose, by Ill-Used.
Octagon <sup>b</sup> .....	1894	...do...	16.1½	1,200	By Rayon d'Or; dam, Ortegai, by Bend Or.
Belfry II.....	1908	Bay.....	16.1	1,200	By Rock Sand; dam, Beldame, by Octagon.
Footprint.....	1908	Chestnut	16.1	1,200	By Rock Sand; dam, Fetish, by Rayon d'Or.
Dandy Rock.....	1910	Brown..	15.3	1,150	By Rock Sand; dam, Donna Mia, by Ill-Used.
Boola Boola.....	1907	...do....	16	1,200	By Ben Brush; dam, The Mecca, by Midlothian.
Black Dick.....	1898	Black...	16.0½	1,150	By Sir Dixon; dam, Merdin, by Hindoo.
Merry Task.....	1907	Bay.....	16	1,150	By Octagon; dam, Merry Token, by Merry Hampton.
Saint Rock.....	1913	Chestnut	16	1,100	By Rock Sand; dam, St Pricilla, by Rayon d'Or.

<sup>a</sup> Octagon, Henry of Navarre, Belfry II, Footprint, and Dandy Rock were donated to Mr. August Belmont, of New York, N. Y., prior to 1913. Boola Boola was donated by Mr. Johnson N. Camden, of Versailles, Ky., in January, 1913. Black Dick was donated by Mr. Thomas Nelson Page, of Virginia, in November, 1915. Merry Task and Saint Rock were donated by Mr. August Belmont in July, 1917.

<sup>b</sup> Octagon died July 3, 1917.

*Stallions donated to the Government—Continued.*

Name.	Year foaled.	Color.	Height.	Weight.	Breeding.
MORGANS.			<i>Hands.</i>	<i>Pounds.</i>	
Bennington 5693.....	1908	Bay....	15.1	1,060	By General Gates 666; dam, Mrs. Culvers (3711) (s).
Castor 5833 .....	1909	...do....	14.3	1,000	By General Gates 666; Babe, by Bob Morgan 4549.
Red Oak 5249.....	1906	...do....	15	1,040	By General Gates 666; dam, Marguerite, by White River Morgan 482.
Snoqualmie 5783.....	1909	...do....	15	1,000	By Troubadour 5125; dam, Sarah, by Gov. Fiske 3971.
Troubadour of Willow-moor 6459.	1910	...do....	15.1	1,135	By Troubadour 5125; dam, Bob Morgan 4549.

## TERMS.

The terms under which mares may be bred to these stallions are as follows: The owner of the mare agrees in writing at the time of breeding to give the Government an option on the resulting colt as a 3-year-old at a stated price which so far has been \$150. No service fee is charged unless the owner of a colt wishes to be released from the option, in which case it is \$25 for a mature stallion. This means that practically no money is invested in service fees. If the colt is purchased by the Government no service fee is charged. If the colt is offered to the Government and purchase refused, no service fee is charged. The breeder does not have to pay a service fee on a colt which dies, which is deformed, or which is seriously injured.

## LOCALITIES.

In order to facilitate the supervision of the remount-breeding work the territory used was divided into three districts, that known as the first district, including the States of Vermont and New Hampshire; the second, the States of Virginia and West Virginia; and the third, the States of Kentucky and Tennessee. Morgan stallions alone were assigned to the first district. In the second district Thoroughbred, Standardbred, and American Saddle stallions are in use. In the third district the stallions belong to the Standardbred and American Saddle breeds.

## Assignment of stallions to localities, by years.

Stallion.	Locations each year.				
	1913	1914	1915	1916	1917
Beechwood Chester.....	Leitchfield, Ky.....	Leitchfield, Ky.....	Leitchfield, Ky.....	Leitchfield, Ky.....	Leitchfield, Ky.
Be Gue.....	Shelbyville, Ky.....	Shelbyville, Ky.....	Henderson, Ky.....	Henderson, Ky.....	Henderson, Ky.
Belfry.....	Staunton, Va.....	Staunton, Va.....	Staunton, Va.....	Staunton, Va.....	Staunton, Va.
Bennington.....	Northfield, Vt.....	Williamstown, Vt.....	Randolph Center, Vt.....	Alburg, Vt.....	Alburg, Vt.
Black Dick.....				Reform, Va.....	Orange, Va.
Boola Boola.....	Lexington, Va., and Gloucester, Va.	Washington, Va.....	Washington, Va.....	Front Royal, Va.....	Front Royal, Va.
Captain Perry.....	Clinton, Ky.....	Clinton, Ky.....	Clinton, Ky.....	Clinton, Ky.....	Clinton, Ky.
Castor.....	West Fairlee, Vt.....	Chelsea, Vt.....	Chelsea, Vt.....	Chelsea, Vt.....	
Charcot.....	Aldie, Va., and Orange, Va.	Orange, Va.....	Harrisonburg, Va.....	Harrisonburg, Va.....	Orange, Va.
Dandy Rock.....	Gainesville, Va.....	Fredericksburg, Va.....	Fredericksburg, Va.....	Middletown, Va.....	Middletown, Va.
Daniel Webster Lambert.		Grand Isle, Vt.....	Alburgh, Vt.....		
Demodus.....	Boyce, Va.....	Boyce, Va.....	Not used after 1914.....		
Donlyn.....	Hartland Four Corners, Vt.	Woodstock, Vt.....	Woodstock, Vt.....	Woodstock, Vt.....	Woodstock, Vt.
Fair Acre King.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Gallatin, Tenn.
Footprint.....	Gainesville, Va.....	Gainesville, Va.....	Gainesville, Va.....	Gainesville, Va.....	Washington, Va.
Ganadore.....	Orange, Va.....	Bluemont, Va.....	Bluemont, Va.....	Washington, Va.....	Bluemont, Va.
Glacier B.....	Huntington, W. Va.....	Huntington, W. Va.....	Huntington, W. Va.....	Huntington, W. Va.....	Harrisonburg, Va.
Gold Heels.....	Gainesville, Va.....	Gainesville, Va.....	Gloucester, Va.....	Washington, Va.....	
Hamlin McKinney.....	Falmouth, Ky.....	Henderson, Ky.....	Not used after 1914.....		
Hamilton's Chief.....	Stanford, Ky.....	Stanford, Ky.....	Stanford, Ky.....	Stanford, Ky.....	Stanford, Ky.
Henry of Navarre.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.

Highland Cloud.....	Morgantown, W. Va.....	Died in 1915.....			
High Vine.....	Point Pleasant, W. Va....	Point Pleasant, W. Va....	Point Pleasant, W. Va....	Point Pleasant, W. Va....	
Jack Parker.....	Harrisonburg, Va.....	Harrisonburg, Va.....	Not used after 1914.....		
Jesse Dare.....	Albany, Ky., and Hunt- ington, W. Va.	Falmouth, Ky.....	Falmouth, Ky.....	Falmouth, Ky.....	Falmouth, Ky.
Judge Collins.....	Falmouth, Ky.....	Not used after 1913.....			
Kind Sir.....	Crabbottom, Va.....	Huntington, W. Va., Point Pleasant, W. Va.	Middletown, Va.....	Nokesville, Va.....	Nokesville, Va.
King Spier.....	Barber, Va.....	Barber, Va.....	Barber, Va.....	Barber, Va.....	Huntington, W. Va.
Lord Rion.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Gallatin, Tenn.....	Kevil, Ky.
Loyal D.....			Gallatin, Tenn.....	Gallatin, Tenn.....	Clinton, Ky.
Lynchburg.....	Monterey, Va.....	Gloucester, Va.....	Madison, Va.....	Madison, Va.....	Gainesville, Va.
MacNunne.....	Morgantown, W. Va.....	Woodstock, Va.....	Woodstock, Va.....	Woodstock, Va.....	Fredericksburg, Va.
Madison Lambert.....	West Claremont, N. H....	Piermont, N. H.....			
Myles O'Connell.....	Sweet Briar, Va.....	Lexington, Va.....	Not used after 1914.....		
Octagon.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.
Red Oak.....	Plainfield, Vt.....	Plainfield, Vt.....	Middlebury, Vt.....	Middlebury, Vt.....	Middlebury, Vt.
Richford Jay.....	Fredericksburg, Va.....	Fredericksburg, Va.....	Fredericksburg, Va.....	Fredericksburg, Va.....	Woodstock, Va.
Richmond Choice.....	Front Royal, Va.....	Staunton, Va.....	Staunton, Va.....	Staunton, Va.....	Point Pleasant, W. Va.
Sigler.....	Terra Alta, W. Va.....	Terra Alta, W. Va.....	Falmouth, Ky.....	Falmouth, Ky.....	Falmouth, Ky.
Single File.....	Madison, Va.....	Madison, Va.....	Not used after 1914.....		
Snoqualmie.....	Woodsville, N. H.....	Woodsville, N. H.....	Monroe, N. H.....	Tunbridge, Vt.....	South Peacham, Vt.
The Tribesman.....	Dixon, Ky.....	Dixon, Ky.....	Dixon, Ky.....	Dixon, Ky.....	Dixon, Ky.
Troubadour.....	Orfordville, N. H.....	West Claremont, N. H....	Perkinsville, Vt.....	Perkinsville, Vt.....	Perkinsville, Vt.
Twilight M.....	Kevil, Ky.....	Kevil, Ky.....	Kevil, Ky.....	Kevil, Ky.....	Gallatin, Tenn.
Victor Peavine.....	Front Royal, Va.....	Front Royal, Va.....	Front Royal, Va.....	Washington, Va.....	Staunton, Va.
Young Bill.....	Mount Sterling, Ky.....	Mount Sterling, Ky.....	Mount Sterling, Ky.....	Mount Sterling, Ky.....	Mount Sterling, Ky.

Within these districts Government stallions are sent to particular localities where there is a local demand for them. The class of mares in such localities, the lack of good light stallions, the topography of the soil, and the accessibility of the locality are all given consideration before stallions are assigned to particular points. So long as the results justify it, remount stallions are returned to their respective localities each season. For the season of 1917, however, the localities at which remount stallions stood remained practically the same as they were in 1916, but in many instances a different stallion was assigned to a particular point. This was deemed advisable in order that any 3-year-old fillies sired by remount stallions might be bred to other remount stallions provided they were sufficiently well developed. This plan of changing a stallion every four years has recently been made even more desirable because of an agreement with the War Department that owners of 3-year-old fillies might retain them without the payment of a service fee. It is assumed that many of these fillies will eventually be bred if they are not bred as 3 or 4 year olds. This will permit of a grading-up process for particular types of horses that will be discussed in detail further on. (For assignment of stallions to localities see table on the two preceding pages.)

#### CLASS OF MARES BRED.

On account of the provision for free service, mares possessing the following unsoundnesses are not bred to Government stallions: bone spavin, ringbone, heaves, stringhalt, roaring, periodic ophthalmia (moon blindness), and blindness, partial or complete. Mares are selected for breeding to Government stallions that approach either a cavalry or light artillery type. The selection of mares proves an important educational feature as well as assures a much better class of army horses from the first cross. Following are the specifications for cavalry and light artillery types, as appearing in the War Department pamphlet issued in 1916 giving specifications for horses and mules:

*Mature cavalry horses and saddle horses for mountain artillery, Signal Corps, Engineer Corps, infantry, and other purposes:*

The mature horse must be sound, well bred, of a superior class, and have quality; gentle and of a kind disposition; well broken to the saddle, with light and elastic mouth, easy gaits, and free and prompt action at the walk,





FIG. 1.—THOROUGHBRED STALLION, HENRY OF NAVARRE.



FIG. 2.—THOROUGHBRED STALLION, FOOTPRINT.



FIG. 1.—SADDLE STALLION, FAIR ACRE KING.

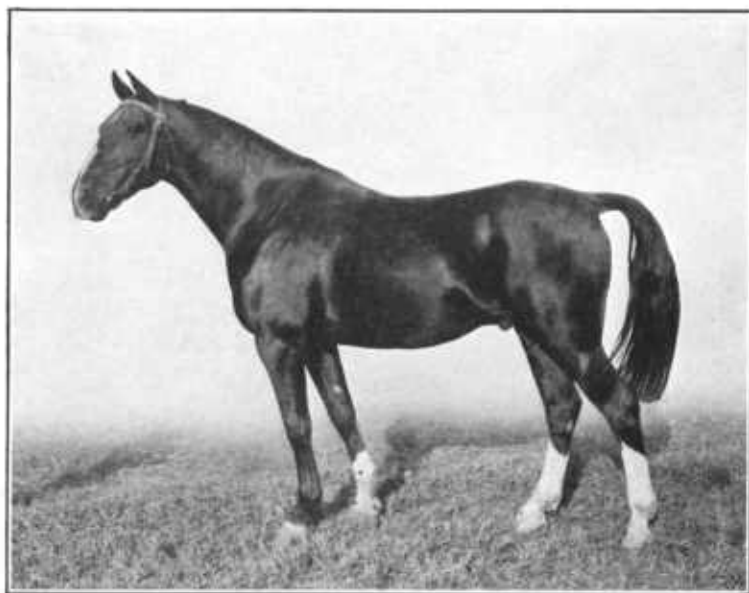


FIG. 2.—STANDARD BRED STALLION, TWILIGHT M.



FIG. 1.—MORGAN STALLION, BENNINGTON.



FIG. 2.—THREE-YEAR-OLD COLT Sired BY GOVERNMENT STALLION.



FIG. 1.—SADDLE STALLION, JESSE DARE.

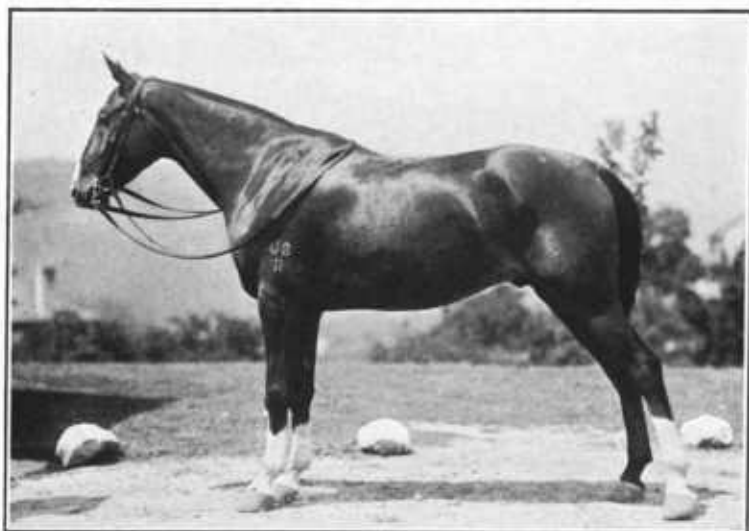


FIG. 2.—FOUR-YEAR-OLD Sired by Government Stallion.  
Initials U. S. R. mean United States remount.

trot, and gallop; free from vicious habits, without material blemish or defect.

A gelding of specified color, in good condition, from 5 to 8 years old at time of purchase; weighing from 950 to 1,200 pounds, depending on height, which should be from 15 to 16 hands, and otherwise to conform to general description for horses.

#### *Artillery horses for light and horse batteries:*

The artillery horse for light and horse batteries must be sound, well bred, of a superior class, and have quality; of a kind disposition, well broken to harness, and gentle under the saddle, with easy mouth and gaits, and free and prompt action at the walk, trot, and gallop; and free from vicious habits; without material blemish or defect.

A gelding of specified color, in good condition, from 5 to 8 years old at time of purchase; height from 15½ to 16 hands; weight from 1,150 to 1,300 pounds, depending on height, and otherwise to conform to general description for horses, except that the neck and shoulders of the artillery horse should be somewhat more heavily muscled than the cavalry horse, and shoulders so formed as to properly support the collar.

Horses otherwise satisfactory which fall short of or exceed these limits of weight by not more than 50 pounds, due to temporary conditions, may be accepted.

The artillery horse for light and horse batteries is required for quick draft purposes, and should be heavy enough to move the carriage ordinarily by weight thrown into the collar rather than by muscular exertion. Long-legged, loose-jointed, long-bodied, narrow-chested, coarse, and cold-blooded horses, as well as those which are restive, vicious, or too free in harness, or which do not upon rigid inspection meet the above requirements in every respect, will be rejected.

### RESULTS OBTAINED FROM STALLIONS.

#### *Summary of stallions' records.*

Breeding season.	Number of stallions.	Number of mares bred.	Average number of mares bred per stallion.	Living foals.	Aborted or dead foals.	Number of mares failing to get with foal.	Per cent of mares impregnated.
1913.....	41	1,551	38	606	111	834	46
1914.....	43	2,014	47	818	109	1,087	46
1915.....	37	2,150	58	948	129	1,073	50
1916.....	36	2,019	56	a 717	.....	.....	.....
1917.....	35	a 1,448	.....	.....	.....	.....	.....

a Includes only reports received to June 30, 1917.

Sterility in various forms is the chief cause of stallions not getting a larger percentage of mares in foal. In the Army horse-breeding work an effort is made to eliminate mares thus afflicted as quickly as they are detected. With all precautions, however, a certain percentage of sterile mares will be bred. The failure of the owner to return his mare at the proper time to have her tried and rebred if necessary is another cause of stallions not foaling a larger percentage

of their mares. To counteract these conditions mares bred to remount stallions are given artificial services when practicable, as this form of service sometimes impregnates mares after a natural service has failed.

Allowing for the above-mentioned disadvantages, remount stallions have made a good showing in the number of colts obtained, 3,089 having been dropped since the beginning of the work to June 30, 1917. There has been an increase in the number of colts obtained annually per stallion, which signifies that a better class of mares is being bred each year and that the remount breeding work is undergoing conservative development.

#### PURCHASES BY THE WAR DEPARTMENT IN 1917.

As previously stated, the first appropriation for the remount breeding work was made available for the breeding season of 1913, making the first crop of 3-year-old colts available for inspection and purchase by the War Department in 1917. The inspection was made during the months of April and May, and the results are summarized in the accompanying table. An early inspection of the first crop of 3-year-olds was deemed advisable in order that farmers would be assured that the Government was anxious to purchase those colts which were up to the specifications, and it was thought this would be apt to stimulate the breeding of desirable mares in 1917. Also, as the War Department was expecting soon to purchase a large number of mature horses for the European conflict, it was necessary to have the purchase of colts completed at an early date. While an early inspection had its advantages, it also had disadvantages, due to the fact that the previous winter had been a hard one on stock generally and many colts were submitted which were too thin to be accepted by the War Department. A few were under the required height and were not purchased. Many such colts would probably have passed had they been inspected after having been on good pasture two or three months; consequently, circumstances permitting, colts will be inspected in the middle of the summer in the future.

## Results of inspection and purchase of 3-year-old colts in 1917.

Stallion	Colts available.	Colts died.	Service paid.	Fillies retained.	Not shown at inspection.	(Rejected causes.)					Purchased.	
						Undersized.	Poor conformation.	Physical defects.	Color.	Uncastrated.	Colts.	Fillies.
Beechwood Chester.....	15	1	0	3	2	3	1	1	1	0	2	1
Be Gue <sup>a</sup> .....	4	0	0	1	0	1	0	1	0	0	0	0
Boltry.....	17	4	2	3	1	2	0	1	2	0	1	1
Bennington.....	21	6	0	4	1	0	0	3	0	0	4	3
Boola Boola <sup>b</sup> .....	15	0	1	2	0	2	0	2	0	0	4	5
Captain Peary.....	19	2	0	8	3	2	0	0	0	0	3	1
Castor.....	23	3	1	3	1	7	1	0	0	2	2	3
Charcot.....	14	4	2	1	3	2	1	0	1	0	0	0
Dandy Rock.....	6	2	0	0	1	2	0	0	0	0	0	1
Daniel Webster Lambert.....	1	0	1	0	0	0	0	0	0	0	0	0
Donlyn.....	13	4	1	1	0	3	0	0	0	2	1	1
Fair Acre King.....	7	0	0	3	0	1	0	0	0	0	2	1
Footprint.....	21	2	2	0	10	0	0	0	0	0	4	3
Ganadore.....	21	3	1	3	2	3	0	1	1	0	2	5
Glacier B.....	21	5	1	4	2	1	3	0	3	1	1	0
Gold Heels.....	10	1	0	1	3	1	0	0	0	0	1	3
Hamilton's Chief.....	16	0	0	9	0	1	1	0	0	0	2	3
Henry of Navarre.....	16	4	0	1	1	1	0	0	0	0	5	4
Highland Cloud.....	11	1	0	3	1	2	1	0	1	0	2	0
High Vine.....	26	3	1	2	4	2	0	4	0	0	6	4
Jack Parker.....	6	0	1	0	1	1	0	0	0	0	0	3
Jesse Dare.....	26	0	1	16	2	0	0	0	0	5	2	0
Judge Collins.....	12	0	0	1	0	0	2	0	1	0	4	4
Kind Sir.....	3	0	0	0	3	0	0	0	0	0	0	0
King Spier.....	17	2	0	1	0	6	0	1	0	1	2	4
Lord Rion.....	7	0	1	1	0	1	1	0	0	0	2	1
Lynchburg.....	5	0	0	0	3	0	0	0	0	0	0	2
MacNunne.....	11	0	1	5	0	2	0	1	0	0	1	1
Madison Lambert.....	13	1	1	1	0	2	2	0	0	4	1	1
Octagon.....	20	0	2	1	5	0	1	0	0	0	7	4
Red Oak.....	14	6	0	2	0	1	1	0	2	0	2	0
Richford Jay.....	27	1	2	2	1	1	3	1	2	0	11	3
Richmond Choice.....	1	0	0	0	1	0	0	0	0	0	0	0
Sigler <sup>c</sup> .....	13	1	0	2	3	1	1	.....	.....	.....	0	0
Single File.....	23	4	0	4	1	2	1	0	1	0	4	6
Snoqualmie.....	14	2	0	2	0	2	6	0	1	1	0	0
The Tribesman.....	19	1	0	9	1	1	1	0	0	0	4	2
Twilight M.....	28	1	0	4	0	3	1	4	0	0	8	7
Young Bill.....	19	0	0	8	4	0	0	0	0	0	4	3
Total.....	575	64	22	111	60	59	28	20	16	16	94	80

<sup>a</sup> One Be Gue colt passed inspection, but was not purchased, as shipping expenses would have made it impracticable.

<sup>b</sup> One Boola Boola colt purchased on which service fee had previously been paid.

<sup>c</sup> Purchasing officer decided not to incur shipping expenses on the few Sigler colts available, as owners preferred to keep them.

One hundred and seventy-four colts were purchased by the War Department, and 60 colts were not submitted for inspection. Service fees will be paid on some of the latter, and the others will be inspected later. One hundred and eleven fillies were retained by their owners, and it is probable that a large per cent of these will eventually be used as brood mares. Also, some of the 59 undersized 3-year-olds were fillies, and these too may add to the future brood-mare supply. This feature must be given due credit because the subsequent use of these fillies for breeding purposes will be a far-reaching one, both to the communities in which they are owned and to the Government.

The undersized colts will be inspected again as 4-year-olds, and the War Department will purchase any which have developed sufficiently to meet its requirements. In the meantime, or after the first inspection, the owner is relieved of the option and may dispose of the colt as he sees fit. Sixteen colts were submitted which had not been castrated, and they were not purchased, although they will be in the future, provided that in the meantime they are castrated and otherwise come up to the specifications. The five uncstrated colts by Jesse Dare were so much superior to anything else in the vicinity of Albany, Ky., that the owners wished to keep them for breeding purposes. Service fees were paid on 22 colts, and 64 had died or were reported dead, between the time of making up the statements of the number available and the time of inspection.

Such conditions, together with the fact that this is the result of the first year's breeding, accounts for the War Department's not getting so large a number of colts as may well be expected in the future when the work has been brought to greater proficiency and breeders better understand the working of the plan and the class of colts required by the Government. The first few years' work must be regarded partially as pioneer work. At that, a very large percentage of the colts were desirable. Deducting the number of dead colts and the number not brought in for inspection from the number available, leaves 451 that were actually inspected. The colts which the War Department purchased; the fillies which were retained by their owners, and the colts on which the service fees were paid constitute over 68 per cent of those



inspected. These are desirable colts and as a class are considerably above the average. The colts rejected on account of their color were mainly excellent individuals. As just pointed out, many of the undersized colts will very probably average high as to individuality, and some of them may be purchased at a future inspection. Considering these facts, to state that 68 per cent of the colts were above the average does not tell the whole story, as this percentage will undoubtedly be considerably higher after subsequent inspections have been made. Had the off-color colts been graded and included in computing the percentage, it would have been higher.

#### ADVANTAGES OF REMOUNT PLAN.

Another plan that has been suggested for the production of Army horses is for the Government to maintain sufficient brood mares from which to raise its own horses. This would necessitate the purchase and maintenance of several thousand mares, practically all of which would be idle. Under very favorable conditions and with maximum results each colt produced would readily cost considerably over \$100 the day it was foaled, and with the cost of rearing added to this, the cost to the Government of colts reared in this way would be far in excess of the cost of colts produced under the plan now in operation, besides taking an important side line from farmers. Under the present plan the brood mares are usually farm work mares which generally pay for their feed by doing farm work, and the colts are produced at birth without cost.

Under present market conditions there is little opportunity for an owner to make money by standing a high-class light stallion, because farmers generally prefer to breed to a draft horse. Consequently, where light stallions are available in farming sections they are likely to be very cheap horses, because such horses have some chance of doing a fairly profitable business by standing for a low service fee. Cheap stallions also are usually peddled from farm to farm, and some farmers persist in using such horses on account of their convenience and low fee. Inferior stallions are largely responsible for the scrubs and misfits. By furnishing high-class stallions at a nominal fee and offering a market for the

colts, as the Government is doing, this condition will be largely corrected.

Community breeding has been of inestimable value to the live-stock interests of England and France. It has been successful in this country where given a fair trial. The chief difficulty with this plan of breeding in this country is to get farmers to organize and stay organized. Under the remount plan of breeding the Government takes care of all necessary organization, and it is not necessary for the farmer to do anything more than breed the mares and raise colts. This plan of breeding will eventually lead to community breeding if localities fortunate enough to be selected by the Government as a stand for their stallions will give the support which the system justifies.

No constructive effort has heretofore been made in this country to produce horses of cavalry and artillery types. Horses of these types have been selected from among those that were bred to trot fast, for running speed, for high action, or for saddle gaits, but which did not inherit these characteristics in sufficient degree to make them valuable for the purpose for which they were bred. The object of the remount breeding work is to select for and breed sound horses with quality, stamina, and endurance, and conforming to the cavalry or artillery types. Such animals will also be useful, especially in mountainous sections, for riding and driving purposes and for general farm work.

Records of the Department of Agriculture show just where the colts are. They are in limited areas and are readily inspected and assembled for shipment. Much money will consequently be saved by the Government in travel and shipping expenses.

#### IMPROVEMENTS AS WORK PROGRESSES.

The Government must make light-horse breeding as attractive in certain localities as is the raising of draft horses and mules. This must be accomplished largely by paying a suitable price for the colts, and this price must be based on the cost of production, plus a reasonable profit, and not on the present market price of light horses.

Farmers should retain their best mares for breeding purposes and properly feed and "grow out" their colts. Because

of insufficient feeding some farmers do not realize the possibilities in their colts.

High-class stallions should be obtained to take the place of those which die or are no longer used. This will be possible only when sufficient funds are allowed for the work. In case a stallion fails to sire a sufficient number of the proper types of colts he is castrated.

With the provision made by the War Department for allowing owners to keep the filly foals without the payment of a service fee, a grading-up process can be carried out after the plan has been in operation for sufficient time to make a large number of mares sired by remount stallions available. As already stated, stallions will be changed in most localities every four years, and an effort will be made to return a stallion of the same breed. At some points at least it may be found desirable to do some line breeding in order more rapidly to fix and perpetuate type. Artificial insemination of mares will be relied upon more and more as the number of good mares obtained exceeds the number which can be taken care of by natural service.

#### AN AGRICULTURAL AS WELL AS A MILITARY PROJECT.

Notwithstanding the necessity for the remount-breeding work from a military standpoint, this work is nevertheless largely an agricultural proposition. While it is true that the draft horse is to-day looked upon as the agricultural horse in this country, still there are sections where strong, robust, light horses are preferred for farm work and are necessary for other purposes. Take the mountainous and semimountainous sections of Virginia, for instance. There are many such sections in other States as well. For soils of such topography light horses are well suited because of their activity, sure-footedness, superior lung capacity, and endurance. On such farms heavy agricultural machinery is practically out of the question, so that heavy horses will very probably never be an economic necessity. A considerable portion of such land is usually used for grazing purposes and the owners require saddle horses for getting over their farms. The roads are generally none too good, and consequently horses must be the means of transportation, during the winter at least. Many such sections do

not enjoy the advantages of railroads, and farm produce must be transported many miles by wagon. For such purposes horses carrying an infusion of thoroughbred blood are very popular, and it is a common sight to see six active horses with quality, and weighing around 1,200 pounds, drawing a heavily loaded canvas-covered wagon up a mountain grade at a smart walk. It is not unusual for young horses to be purchased out of such teams and in a few months developed into officers' mounts or hunters. As an example of the usefulness of horses carrying thoroughbred blood may be cited a pair of half-bred horses that, after serving their time as hunters, were used as leaders in a farm team and in that capacity wore out three pairs of wheelers which were worked behind them. In mountain grazing sections it is practicable to raise a few colts from the farm mares and under such conditions light colts frequently pay better than draft, because such conditions are more apt to develop sure-footedness, good feet, endurance, and quality rather than weight, which is the predominant requisite of a draft horse.

In short, the Government's plan of aiding farmers in such sections in producing Army horses is giving them material aid as well as educational aid in developing an important phase of their farming operations. Good horse power is indispensable to successful farming, and good horses can not be produced without good sires. From the agricultural standpoint alone, the remount-breeding work should be extended to other suitable localities, to say nothing of the resultant effect of adding to the defensive strength of the country in a military way.